Health Mobilization Series A-4

Health Materiel and Facilities
PLANNING GUIDE
for Emergency Management

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Public Health Service

Health Mobilization Series A-4

Health Materiel and Facilities
PLANNING GUIDE
for Emergency Management

U.S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
Public Health Service
Division of Health Mobilization
1965

Public Health Service Publication No. 1071 A–4

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C., 20402 - Price 20 cents

CONTENTS

APPENDIXES

FIGURES

RESPONSIBILITIES

Management of resources in a national emergency is the responsibility of governmental agencies at all levels. Under conditions of devastating attack, the highest degree of cooperation would be required to utilize and conserve health resources most effectively. This can be facilitated by the prior development of coordinated plans at all levels and organized preparedness to execute these plans.

The Public Health Service (PHS) (Emergency Health Service (EHS) postattack) of the U.S. Department of Health, Education, and Welfare (DHEW) has the responsibility for assisting the States and communities in developing national emergency health plans for the civilian population. The National Plan for Emergency Preparedness, Chapter 4, Health, specifies that the DHEW (with the PHS as the operating agency for this purpose) shall function as a claimant agency for preparing and justifying requirements for civilian health resources to the Office of Emergency Planning (OEP), the resource agency. Also, DHEW, EHS shall allocate to the States those health materiel resources made available for emergency health services. National health plans are being developed on the basis that in a national emergency the Emergency Health Service of the DHEW will carry out the plans developed by the Public Health Service. (Executive Order 11001 sec. 13 par. (c).) Appendix A presents the organization and functions of the Emergency Health Service, DHEW.

The postattack responsibilities of the State health agencies will parallel the responsibilities of the EHS. The State health agency is responsible for the administration of resource activities for essential emergency health services. It must develop a capability (organizational structure, trained staff, and suitable procedures) for directing health operations and for estimating the requirements for all items and services that will be needed by local emergency health organizations. The State agency must develop the capability to control and direct the use of health resources (facilities, supplies, and manpower) under the jurisdiction of the State and primary health resources during the period when the Federal Government is unable to act. As the health claimant agency for the State, it must be capable of (1) developing estimates of the State requirements for all health and supporting resources, and (2) justifying its estimate through the Federal Regional Emergency Health Service (postattack) to the Emergency Health

Service at the national level. To accomplish its emergency planning mission, the State health agency will find it advantageous to cooperate with other State agencies, emergency planning groups, professional organizations, Local EHS, civil defense organizations and Federal agencies.

Health manpower, materiel, and facilities are considered the supporting elements of health operations. This guide is restricted to the management of materials and facilities; it excludes health manpower which is treated separately.*

*See Community Emergency Health Manpower Planning, 1964. PHS Publication No. 1071–I–1.

INTRODUCTION

A. PURPOSE

This guide has been prepared to assist regional and State health materiel and facility resource management planners by setting forth the following:

1. The pertinent considerations which apply to all activities and agencies having health materiel resource management responsibilities.

2. The assumptions under which planning must be conducted.

3. A method for developing an organizational capability for the management of health resources.

4. The basic elements required for damage assessment and resource evaluation under conditions of nuclear attack.

5. The basic elements necessary for the computation of estimates of health supply requirements based on nuclear weapons effects.

6. The claimant and associate claimant responsibilities for civilian health and supporting resources.

7. The organizations and levels through which allocations and distributions will be made.

8. The need for State level production planning for selected health survival items.

B. AUTHORITY

Title III of the Federal Civil Defense Act, Public Law 920, and the Defense Production Act of 1950 are the basic Federal laws which govern

the administration of resource control measures in a national emergency.

Some States have amended their civil defense laws or enacted other emergency statutes to authorize State execution of national resources control measures within their jurisdiction. Other States will require this legal authority.

C. PUBLISHED GUIDANCE

Health materiel resource planning should be conducted in consonance with Federal and State documents. Every effort has been made to avoid duplication of material, therefore, the following will be useful in providing additional guidance in the performance of the planning functions:

1. The National Plan for Emergency Preparedness (OEP)
   a. Chapter 4, Health
   b. Chapter 5, Manpower
   c. Chapter 6, Transportation
   d. Chapter 9, Water
   e. Chapter 12, Resource Management
   f. Chapter 14, Production.

2. Organization and Planning Guide for the Emergency Management of Resources (OEP).

3. Example of a State Plan for Emergency Management of Resources (OEP) Part B—Resource Sections. VI Health Resources, VII Industrial Production, and XII Water.

4. Federal Civil Defense Guide, Part B, Chapter 1, Appendix 28 (OCD).

5. OEP Circular 8500.4A, Subject: *Designation of Federal Claimant Agencies for Emergency Preparedness Planning*, dated May 1, 1965.

6. OEP Defense Mobilization Order 8500.1A Subject: *Guidance on Priority Use of Resources in Immediate Postattack Period*, dated November 1964.

7. *The Defense Materials System and Priorities* Department of Commerce, Business and Defense Services Administration (DOC–BDSA).

8. *Community Emergency Health Manpower Planning Guide* (PHS Publication No. 1071–I–1).

9. *The Selection of Civil Defense Emergency Hospital Storage Sites* (DHM Memo. No. 64–66–H, 7/1/64).

10. *Community Emergency Health Preparedness* (PHS Publication No. 1071–A–2).

11. State Survival Plans, Health Annex.

12. The Effects of Nuclear Weapons, U.S. Atomic Energy Commission or Department of Army Pamphlet No. 39–3.

13. The NWDA Drug Trade, Market Data, The National Wholesale Druggists' Association.

Additional health resource information can be obtained from the following, or their publications:

American Surgical Trade Association.
Manufacturers Surgical Trade Association
Federal Wholesale Druggist Association
National Association of Chain Drug Stores
Pharmaceutical Manufacturers Association
District Offices of the Food and Drug Administration.

D. POSTATTACK TIME CONSIDERATIONS

In order to provide for orderly planning and to supply a time phasing to prepare estimates and take action, the following time periods are suggested. Starting from the day of attack, they are:

1. D–Day to D+14
2. D+15 to D+30
3. D+31 to D+60
4. D+61 to D+90
5. D+91 to D+180
6. D+181 to D+365.

E. RESOURCE CONTROL MEASURES

As soon as possible postattack, State and local governmental agencies will provide for controlled distribution of goods and services essential to the maintenance of life, protection of property, and the continuity of government.

778–258 O—65——2

State health agencies will be responsible for directing the utilization of secondary health resources within the State and primary health resources allocated to them (see p. 8). They shall also be responsible—during the short period before Federal controls can be established—for preserving and managing primary health materiel resources. Caution must be exercised to permit the unfreezing of secondary inventories to provide for the immediate, but controlled, movement of health items for survival purposes. The inventory freeze is not intended to apply to damaged areas. DHEW—through the EHS headquarters and regional offices and the State health agencies—will prescribe standards to conserve and to increase the civilian supply of health materiel and facility resources. Mandatory and direct control measures, when imposed by the Federal Government, will be administered through the regional and State organizations. The health materiel management organization should be prepared to supplement resources control measures in the following categories:

1. Priority and allocation system
2. Production directives
3. Consumer rationing orders
4. Inventory control and antihoarding orders
5. Construction regulations
6. Interstate and intrastate movement controls
7. Requisitioning orders (abbreviated procedures for the exercise of governments' right of eminent domain over property when required for the general welfare).

F. HEALTH RESOURCE MANAGEMENT ACTIVITIES

Effective emergency management of resources will require the incorporation of emergency organization and program activities into peacetime government health structure. To be meaningful, governments must have operational plans which will prepare for the coordination or control of health facilities, supply, resupply, communications, and transportation services as necessary. Planning is a prerequisite to coordination, cooperation, and integration of health and supporting supplies and services, all essential to medical and health care. The activities listed below are basic to health resource management:

1. Evaluating the probable future requirements for and supply availability of health supplies and equipment. (For planning guidance the essential survival item list* is recommended for postattack planning through D+180.)

*OEP Defense Mobilization Order No. 8500.1A Subject: *Guidance on Priority Use of Resources in Immediate Postattack Period*, dated November 1964.

2. Establishing and administering programs, policies, and measures necessary to assure the most effective use of existing resources. Participating in national programs for management of potentially available health materiel resources and to improve the future supply situation.

3. Establishing an integrated system for gathering and reporting supply and equipment requirements, necessary to meet the needs of each administrative level of government, in providing for preventive health, casualty care, and hospital and related facility operation.

4. Selecting in advance, primary and alternate delivery points for the receipt and controlled distribution of primary and secondary health resources.

PRIMARY HEALTH RESOURCES

Federally controlled health materials and facilities include:

1. Military stocks of health items (DOD controlled) and health end-items in storage at:

   a. Civil Defense medical stockpile locations

   b. Veterans Administration supply depots

   c. PHS supply service center

   d. Interstate producers plants and distribution points

   e. Bureau of Narcotics storage locations.

2. Building and operating plants of the following facilities:

   a. CD medical depots

   b. VA supply depots

   c. PHS supply service center

   d. Production plants of health supplies (BDSA controlled)

   e. Interstate health supply wholesalers warehouses (BDSA controlled

   f. Federal (nonmilitary) health installations*

   g. Military health resources (DOD controlled).

Interstate Commerce Commission requires, in General Order ICC TM–12, that certain carriers off-loading medical supplies before delivery to original consignee store and report this action to the U.S. Department of Health, Education, and Welfare (PHS) (EHS postattack) for disposition.

*Federal nonmilitary medical care facilities (e.g., hospitals, clinics, and health centers) shall be made fully available to help meet local emergency medical care needs. Officers in charge shall retain control of their facilities, material resources, and personnel and shall coordinate their plans with local civil defense directors.

SECONDARY HEALTH RESOURCES

State controlled health materials and facilities include:

1. Health end-items in storage at:
   a. Wholesale warehouses including producers of regional distribution points

   b. Intrastate producers warehouses

   c. Drug stores and other retail outlets

   d. Packaged Disaster Hospital supplies (pre-positioned in the States).

2. Buildings and operating plants of the following facilities:

   a. State and local medical stockpile storage sites

   b. Health facilities including health laboratories

   c. Operational sites for Packaged Disaster Hospitals (PDH supplies stored by the States)

   d. Intrastate wholesale warehouses

   e. Public water supply systems

   f. Medical care facilities and laboratories

   g. Health and medical schools.

Appendix D—Health Resources Index—lists each type of health material and facility, classifying each as primary or secondary, and indicating those facilities which have an immediate postattack local assignment and will be recalled to a Federal mission at a later date.

In order to assure maximum use of Federal nonmilitary health care facilities in a cutoff situation, State and community health resource planners must include provisions for their resupply in the immediate postattack period.

ASSUMPTIONS

A. GENERAL

Estimates of possible postattack conditions and tentative policy decisions pertaining to each are a prerequisite for preparedness planning. However, the large geographic area and diversity of economic activity contained within a State or region are such that an operational plan must have sufficient scope and flexibility to encompass all contingencies. The nature and direction of planning, channels of coordination, and procedures to be developed will be influenced by the estimated existence or absence of the following nuclear weapons effects:

1. Widespread fallout lasting as long as two weeks

2. Blast damage and thermal effects
   a. Areas of moderate damage and total destruction
   b. Areas of scattered fires and minor repairable damage to health facilities.

B. OPERATIONS PLANNING ASSUMPTIONS AND ACTIONS

1. The OCD Regional Director will coordinate civil defense activities and the OEP Regional Director will coordinate the resource management activities of Federal agency field organizations within their regions.

2. The DHEW Regional Director will be responsible for the provision of health and welfare services guidance for the civilian population in the OCD/OEP region, consistent with the DHEW preattack plans. (The Regional Health Director will be the DHEW operating official for health activities.)

3. Federal stockpiles of medical supplies in VA and CD medical depots may not be available for distribution until as late as 4 weeks postattack.

4. Allocation of facilities for health care operations planning will be coordinated with the civil defense plans and directives of the States, regional offices, and Federal agencies.

5. Lines of communication, transportation, and electric power within the severe and moderate damage zones will be disrupted or destroyed. Hours, days, or weeks may be required to reestablish these services.

6. Shipments of medical supplies will be delayed and/or diverted, and their arrival at destinations will be uncertain.

7. Transportation facilities undamaged by nuclear detonation may be within or pass through contaminated areas. It will be necessary to abandon customary routes or bypass contaminated areas.

8. Damaged medical facilities will have to be replaced and hospitals will need to expand their bed capacities.

HEALTH MATERIEL ORGANIZATION AND FUNCTIONS

A. GENERAL

The ultimate objective of health supply planning is to establish an organizational capability to manage health supplies in an emergency. The organization must be prepared to find answers to the questions listed below, and to take necessary actions.

1. What items are required?
2. What quantities are needed?
3. Where and how much can be obtained?
4. How soon can they be obtained?
5. How can they be delivered to the using facility?

Private enterprise meets the normal supply requirements of civilian medical facilities. Supplies are procured from manufacturers, wholesale distributors, and retail outlets. The level of supply held at these points is determined by the manufacturers' marketing techniques and the law of supply and demand. Many manufacturers have established warehouses and communication and delivery systems independent of other distribution systems operating in the same community. In the immediate postattack period it will be imperative to have these health supply distribution systems coordinated and directed from a central point. Otherwise, the many peacetime procedures at various health supply points could delay supply distribution to medical care and treatment facilities where the need will be greatest.

During a national emergency, particularly postattack, medical facilities may not be able to obtain supplies from any outside source for periods up to 4 weeks. It will be essential to manage the supplies on hand carefully and restrict their use.

B. DEVELOPING RESOURCES ORGANIZATION

Developing and maintaining an organization and plans is essential. Figure 1 (page 14) illustrates a step-by-step method for accomplishing these objectives.

C. HEALTH MATERIEL READINESS SURVEY

Figure 2, (page 16) Health Materiel Planners Check List, provides an abbreviated outline in questionnaire form to assist the health planners conduct a health materiel survey. This involves:

1. Development of inventory data for health supplies and equipment (primary and secondary) and supporting items (including spare parts).

2. Estimation of losses based on accepted assumptions and nuclear weapons effects.

3. Preattack or advance estimation of health and related assets likely to be available postattack.

4. Estimation of the postattack availability of supporting goods and services essential to the health services.

5. Development of procedures for determining requirements and for coordinating these with agencies controlling supporting supplies and services.

D. HEALTH FACILITIES PREPAREDNESS PLANNING

Health resource management includes responsibility for health facilities and such related facilities as nurses' quarters, laboratories, out-patient clinics and nursing homes (see Appendix D). Additional responsibilities include the expansion of these facilities and the supporting goods and services for medical care and public health operations. Plans to supply and support Federal nonmilitary (VA–PHS) medical care facilities must be included in State and local emergency health plans. The emergency mission of these facilities is to provide medical care to local casualties until recalled to a Federal mission. Additional and replacement structures may be required to house patients, staff, and to conduct health care activities. Other health organizations to be established in a postattack environment will require building space and supporting services in order to provide the various type of planned medical care and health protection measures.

Figure 3 (p. 19) has been developed to provide broad guidance for developing a management capability for health facility preparedness.*

*Estimates for construction, expansion, and rehabilitation of facilities for care of patients will be based on 75 square feet per bed (laundry and feeding facilities excluded), until such time as resources are adequate to meet the total national requirement.

778–258 O—65——3

FIGURE 1—ORGANIZATION AND FUNCTIONS PLANNING—OUTLINE GUIDE

Activity	Actions Required
1. Gather and study pertinent information and data.	Coordinate with other resource agencies and organizations whose functions relate to health services.
2. List planning assumptions and weapons effects that affect health activities and functions.	Relate planning assumptions to immediate organization level and geographical location. Prepare operating assumptions to fit immediate needs for health resource planning. Prepare plans for physical protection and survival of staff.
3. Development of functional statement.	Develop functional statements in sufficient detail to: 1. Reflect accurately delegated authority and responsibility. 2. Explain the organization's role to planning and operational units.
4. Development of the organizational structure.	1. Assemble functions of a similar nature. 2. Develop organizational structure incorporating necessary subunits. 3. Develop staffing patterns as necessary.
5. Development of administrative plan to enable operations and support of programs, detailed in functional statements.	Develop emergency organizational readiness by: 1. Defining position responsibilities. 2. Designating key positions. 3. Assigning principal and alternates personnel. 4. Notifying personnel. 5. Issuing CD Identification Cards. 6. Assigning relocation site. 7. Pre-positioning vital operating records. 8. Detailing alerting procedures. 9. Insuring readiness of relocation site.

6. Interagency and intergovernmental relationships established. Development of operations or coordinating procedures.	Coordinate plans and procedures to obtain: 1. Primary and secondary health resources. 2. Supporting resources and services. 3. Specialized manpower. 4. Transportation services. 5. Communications. 6. Radiation monitoring capability for supplies, services, and facilities.
7. Development of integrated reporting system for health materiel and facilities.	Develop information and reporting requirements, forms and format for: 1. Hospital and related structures. 2. Health supplies, equipment, and survival items. 3. Supporting items and services.
8. Operational plan for health materiel management completed (including water, health manpower).*	Review plans to assure that: 1. Planning assumptions are consistent with State and Federal guidance. 2. Plans for health materiel and facilities support the emergency health services operational plan. 3. Plans for organization and functions are adequate to cover contingencies assumed. 4. Plans for organization and functions have been coordinated with other services, CD Director, appropriate resource control agencies, and that conflicts are resolved. 5. Administrative plans for office space, supplies, equipment, and services are adequate. 6. Arrangements have been made for damage assessment. 7. Delegated responsibility is adequate to support the emergency health resource management mission.

*Health resource organization and functions are elements of the EHS organization under the supervision of health authorities.

FIGURE 2—HEALTH MATERIEL PLANNERS CHECK LIST

	YES	NO
1. Has the health role (State, county, metropolitan area, etc.,) been determined?		
2. Is special consultation and orientation from the State health department available to local health resource planners?		
3. Have organization and equipment lists been developed for:		
a. Medical field units?		
b. Permanent medical organizations?		
(a. Applicable only to jurisdictions which have organized CD medical services along military lines.)		
4. Does the health materiel management officer have a plan to control distribution of essential health survival items (within his jurisdiction) to medical care facilities?		
To primary and alternate shipping and receiving points?		
5. Have arrangements and methods been created for determining average inventories of health supplies and equipment held in potential refugee areas, retail warehouses, and retail outlets?		
If yes, have plans been made for periodic updating?		
6. Have methods for coordination with responsible Federal agencies been developed to obtain information about health supplies held in primary resource facilities?		
7. Have the health program planners developed methods for computing medical supply item requirements for survivors (both sick and injured and for day-to-day health care of the public)?		
8. Have arrangements and methods for a postattack supply-requirements analysis of health resources been established to identify geographic areas of surplus and deficit?		
If yes, have plans been made to correct deficiencies discovered during the analysis?		
9. Have maps and lists of addresses of the following been developed to guide supply and resource management staffs?		

FIGURE 2—HEALTH MATERIEL PLANNERS CHECK LIST—Continued

	YES	NO
a. Manufacturers of health supplies and equipment?		
b. Health supply wholesalers and their warehouses?		
c. Health supply retailers?		
d. Private health and related facilities?		
e. PDH operational site locations?		
f. Federal facilities and supply points?		
g. State health facilities and supply points?		
h. Public shelters?		
i. Potential refugee areas?		
j. Points at which resupply will be made?		
k. Transportation systems and control points?		
10. Are special consultation, orientation and written instructions available from the health operations planners to review medical supply availability and the use of substitute medical items?		
11. Have any plans been developed with local industries or organizations for postattack production of health survival items using local resources?		
12. Are personnel trained and basic resource data available to perform damage assessment covering the State or region and the immediate adjacent areas?		
13. Does the Health Resource Management Officer have a plan to coordinate existing health supply distribution systems into a centrally controlled emergency system?		
14. Are there standby orders or plans for the control of medical supplies in pharmacies and other secondary sources?		
15. Does the manager of each drug store, health supply depot, and medical warehouse have written instructions and orders for honoring requests for health supplies?		
16. Have civil defense stockpiles of health supplies (State, county, city owned) been packaged into functional units?		
a. Are boxes clearly labeled?		
b. Are perishable health supplies (e.g., biologicals and X-ray film) which require special care and storage conditions properly cared for to extend their life and usability?		

FIGURE 2—HEALTH MATERIEL PLANNERS CHECK LIST—Continued

	YES	NO
17. To what extent is the State or region dependent upon the importation of health supplies and equipment to meet its normal and emergency needs—		
a. Completely?		
b. Partially?		
(1) Biologicals		
(2) Drugs		
(3) Surgical dressings		
(4) Surgical equipment		
(5) Others (list)		
18. Does the geographical area require special health supplies for:		
Veterinary medicine?		
Disease vector control?		
Industrial accidents?		
19. Have plans been developed to carry out a mass immunization program for communicable disease?		
20. Have plans been developed to overcome supply limitations of specific items?		
21. Have coordinating procedures been developed with other organizations responsible for:		
a. Food allocation?		
b. Water allocation?		
c. Communications equipment allocation?		
d. Transportation service allocation?		
e. Utilities allocation (gas, electric, oil)?		
f. Manpower allocations (nonskilled labor)?		
g. Production?		
h. Others? List		
22. Have provisions been made for radiological monitoring of health supplies, equipment and facilities?		
23. Have plans been developed for the salvage of health supplies located in fallout and damaged areas?		
24. Have plans been developed for the use of protective storage sites to assure protection of medical supplies from fallout?		
25. Have mutual agreements between States been made for the preallocation of stocks of health supplies in interstate wholesale and regional producer warehouses?		

FIGURE 3—HEALTH FACILITIES PLANNING GUIDE

TYPE OF FACILITY	PLANNING ACTION REQUIRED
1. Health facilities owned and controlled by private and governmental agencies* a. Hospitals b. Clinics c. Nursing homes d. Laboratories e. Medical office buildings f. PDH's g. Others (list).	Detailed inventory of health facilities within the political jurisdiction for which plans are being developed. Lists of facilities to include: a. Address b. Type (function) c. Bed capacity (normal) d. Bed capacity (expanded) e. Quarters for staff f. Shelter and protection factor g. No. of dischargeable patients.
2. Facilities potentially adaptable as health facilities under emergency conditions: a. Schools b. Hotels c. Motels d. Garages e. Nonessential industrial and business facilities.	Request for the allocation of the facility should be processed through the Civil Defense Director. Selection of relocation site for facility located in a high risk area. Selection, coordination and assignment of buildings for postattack use of the following EHS activities: a. Hospitals b. Dispensaries c. Clinics d. First Aid Stations e. Collecting Stations f. Ambulance Companies g. First Aid Teams h. Litter Bearers.
3. Fallout Shelters (other than residential).	Lists of public shelters to include: a. Address b. Capacity and protection factor c. Amount of health supplies stored therein d. Medical manpower and allied health manpower (nurses, pharmacists, dentists, veterinarians, etc.) assigned (if possible).

*Federal health facilities exclude facilities of the Department of Defense. Lists of hospitals and related facilities have been prepared by the State as a requirement for Hill-Burton Hospital construction grants.

DAMAGE ASSESSMENT AND RESOURCE EVALUATION

A. GENERAL

Damage assessment and resource evaluation embraces all of the economic activities and resources directly related to survival of the individual community, State and Nation. Though many resources will be of interest to health and medical care planners, health and related materials, facilities, manpower, and public water supplies will be of primary interest.

Officials responsible for health care have a vital interest in developing and maintaining techniques to perform assessment and evaluation of resources. The information derived is essential and provides a basis for necessary decision-making in health care operations and the management of health resources. The quantitative damage assessment and subsequent resource evaluation is a prerequisite to resource management and must be developed during the pre-emergency period for maximum postattack benefit to health resource and management officials.

The pre-emergency health supply and facility assets—determined by gathering such data as shown in Figures 2 and 3—can be employed as the basis for conducting damage assessment and resource evaluation.

B. ELEMENTS OF THE DAMAGE ASSESSMENT

During the immediate postattack period, damage assessment techniques and procedures may be the only method of estimating the availability of health resources. The technique and materials to be used will vary with the time period and with the area to be covered. In order to estimate the total situation, all resources and services in the area of the strike must be covered. Initial damage estimate techniques require a system which shows:

1. Location of preattack population and resources plotted on maps and/or lattice grids.
2. Predictions of effects of various sizes of nuclear weapons on damage templates used as overlays.

3. Nuclear attack or detonation data—weapon size (yield), type of burst,* location of ground zero, and time of detonation.
4. Meteorological conditions.
5. Evasive action taken at the time of the detonation.
6. Reports of fallout intensity from specific points.

As time passes and factual data is received, more sophisticated procedures will be substiuted for the initial damage assessment techniques.

C. TECHNICAL DATA AND TRAINING

The templates and overlays required for estimation of damage from nuclear attack must be developed from local resource information and technical attack effects data obtainable from the OCD. When developed, followup training can be provided by the Division of Health Mobilization, Public Health Service, DHEW.

Details of training courses available in damage estimation and resources evaluation is available through the OCD Regional Directors by the Office of Civil Defense.

*See the *Effects of Nuclear Weapons*, United States Atomic Energy Commission or Department of Army, Publication No. 39-3, available from the Superintendent of Documents, U.S. Government Printing Office.

ESTIMATES OF REQUIREMENTS

A. GENERAL

Postattack, supply management officials should be prepared to estimate time-phased (see paragraph D. Postattack Time Considerations) gross requirements for health resources and supporting goods and services based on survivors and casualties.

The groundwork for accomplishing this function must be laid in the pre-emergency period because early postattack estimates must be made before summaries of items and quantities needed by the operating levels are received by the State, region or Nation. The gross requirements estimates must be adjusted to provide net requirements by deducting resources expected to be available during specific time periods postattack. Estimates of net requirements would be prepared as quickly as possible at the State, regional, and national levels, possibly simultaneously.

Estimates of requirements prepared during the immediate postattack period must be coordinated with OCD State and/or regional offices. Coordination with the OEP regional and national offices will be initiated postattack at such times as announced by the Director, OEP. Then, State level estimates should flow from the State health department to the DHEW Regional Office in the case of health resources and to the appropriate State resource agency in the case of supporting goods and services. (See Figure No. 4—Origin of Estimates and Health Requirements Flow.) Estimates of requirements received from the State provide a basis for adjusting the regional estimates of requirements; estimates received from the regions provide a basis for adjusting the national estimates.

The initial estimates would provide the data required by the claimant and resource agencies, at each level, to initiate appropriate action and programs to meet the time-phased net requirements for the materiel needs to carry on health operations.

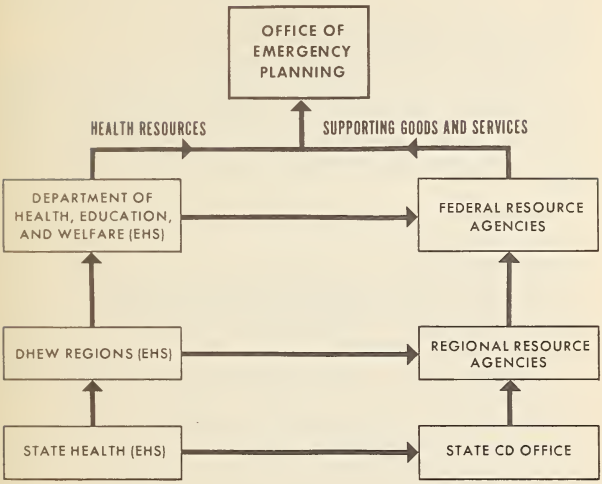

Figure 4.—Federal Emergency Management of National Resources

B. COLLECTION OF DATA

In order to provide a basis for estimating postattack resources availability, methods for collecting data at all levels should be developed during the pre-emergency period. This data would provide information on the current availability and location of health survival items. In addition, health supply management officers charged with resource planning at operations levels should have available estimates of the postattack needs for each essential health survival item and the supporting goods and services necessary for health services. These preattack estimates of requirements can be refined postattack to correspond to the particular situation as it develops.

C. ESTIMATES OF HEALTH MATERIALS REQUIRED

The preparation of early postattack estimates at and above the State level will be based on initial damage assessment techniques. As further information is obtained from operating levels estimates will be continually refined. Early estimates of requirements will be limited to the survival item categories listed in DMO 8500.1A Guidance on Priority Use of Resources in the Immediate Postattack Period.

In order to assist State health resource planners in the pre-emergency task of preparing estimates of gross and net requirements for health survival items, the PHS has developed a series of factors, ratio, and relationships which reflect postattack requirement and resource availability assumptions applied to each State. The following are the basic elements of the PHS system:

1. Population
2. Health personnel
3. Hospital beds
4. Inventories of select medical supplies at secondary levels
5. Casualty classification and postattack health resource population ratio adjustment factors
6. Estimated health status of survivors D to D+30 by casualty classification
7. Estimated postattack medical supply availability at the secondary level per 1,000 survivors
8. Postattack survival item factors.

The necessary information, factor tables, and methods of employing these basic data will be made available to State health resource planners through the PHS Regional and State Health Mobilization Representatives.

CLAIMANCY

Claimancy is a system for obtaining resources controlled by the Federal Government under emergency conditions. The scope of operations of the national system will be determined by the needs of the emergency situation. The stringency of controls will be dictated by the resources available and the quantities needed to meet national objectives.*

The system designates Federal agencies to act as resource agencies and as claimant agencies for and in behalf of assigned segments of the national economy and for services and program areas. A detailed list of agencies and assignments, including definitions of resource and claimant agencies, is presented in OEP Circular 8500.4A—*Designation of Federal Claimant Agencies for Emergency Preparedness Planning*. The Federal agency assignments contained therein are based on emergency preparedness responsibilities assigned by Executive Orders and the peacetime statutory program responsibilities of these agencies. The health services and resource requirements programs assigned to the DHEW–PHS have been extracted from the circular cited above and are contained in Appendix B.

A designated health claimant agency has the responsibility for developing and/or assembling data on the amounts of goods, services, and manpower that will be required during stated future time periods to carry out its program responsibilities, other health programs of the government and the health services resource requirements programs for the civilian population. The preparation of claims for resources will utilize estimates of requirements, the determination of which has been described in the preceding section.

Because civilian health and related programs will be required to channel their needs for resources through health officials to the DHEW–EHS, State level health resource planners should develop the management procedures to cover the assigned areas (see Appendix B) and to supplement the Federal system described above. They should be prepared to interpret the resource and claimant agency directives and orders to the appropriate health program areas, and to receive and take action upon applications for authorization for controlled materials.

DHEW–EHS, the civilian claimant agency, after preparing, submitting and justifying time-phased estimates of requirements (for controlled materials), will receive and allocate the controlled materials from the appropriate Federal resource and/or claimant agency for suballocation to the various geographic areas and divisions of the health and medical care economy.

*A limited self-regulating form of claimancy is presently being conducted by the Department of Commerce, Business and Defense Services Administration (DOC–BDSA), through the *Defense Materials System and Priorities*.

ALLOCATION

Allocation, as used in this section, is defined as notification from a Federal resource agency that a claimant agency has been authorized to receive a specific quantity of a controlled material, service, or end-item to meet its program needs.

Suballocation is defined as the division of an allocation by the claimant agency to regions, States and/or the civilian distribution system.

FLOW OF ALLOCATIONS OF FEDERALLY CONTROLLED RESOURCES

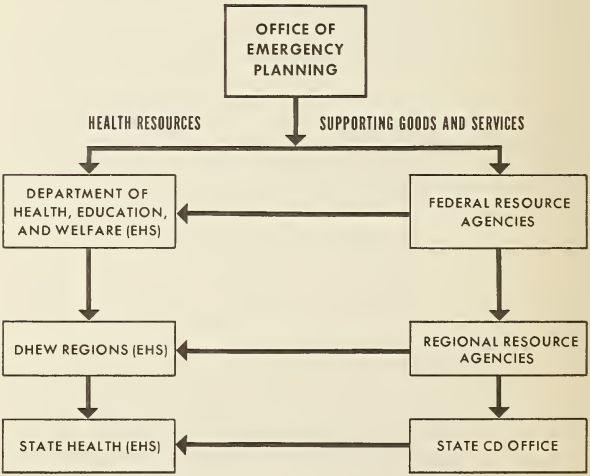

Figure 5.—Federal Emergency Management of Natural Resources

An allocation of the total health material resources available will be made by the OEP. Other Federal resources agencies will allocate supporting goods and services to the health care programs. Health resource claimant agencies are the DHEW, DOD, and the Department of State.

The allocation of health resources made available by the OEP for the civilian population will be suballocated through the DHEW–EHS regional organization to State health offices.

The procedures to be followed when applying for or requesting controlled materials and services required for health care operations will be prescribed by the Federal resource agencies. Claimant agencies will coordinate or supplement such procedures to define clearly the application of the instructions to the affected program or economic activity.

Suballocations of supporting resources will be made in cooperation with the DHEW regional organization and by the appropriate resource and claimant agency to the State emergency health organization. Suballocations of health resources intended for direct civilian consumption will be made through the BDSA for the resupply of the wholesale and retail distribution system. (See Figure 5—Flow of Allocations of Federally Controlled Resources.)

Allocations and suballocations of resources will be held within the distribution and priority system developed by the OEP and the BDSA Department of Commerce. Allocation and distribution of end-item production (within totals allocated to civilian health) will be coordinated with the BDSA.

State level health resource planners should refer to the OEP *Example of a State Plan for Emergency Management of Resources* for the particular resource or service. Until such time as the emergency organization of the Federal Government is activated and emergency procedures announced, the Defense Materials System and the priorities procedures established by the DOC–BDSA will be followed by all industries producing for national defense programs.

DISTRIBUTION

DHEW–PHS is responsible for the preparation of schedules of domestic distribution of all health supplies and equipment, supporting goods and services allocated for civilian health. It shall also coordinate and time-phase deliveries through DOC–BDSA for end-item production.

The development of consolidated national requirement for the following programs and activities (excluding military health resources) will be the exclusive responsibility of the DHEW–EHS:

1. Health departments (local, State, regional, and Federal)
2. Health and medical laboratories (diagnostic, research, and other)
3. Hospitals (public and private, general, mental, tuberculosis, and other specialty hospitals).
4. Medical care (other than in hospitals):
    a. Physicians, dentists, nurses, and other accredited health practitioners
    b. Health rooms, convalescent homes, infirmaries
    c. Ancillary services (mortuary and ambulance)
    d. Public Health
5. Health and medical supplies procured directly by the general public
6. Water, sewerage, and sanitation.
7. Other programs or activities as may be assigned by the resource agency.

In order to provide direct administrative channels thereby reducing possible delays for materials, the resource management responsibility should be centered in the State health department.

PRODUCTION PLANNING

A. NATIONAL

Production planning is being carried on with manufacturers at the national level by DOD, DHEW, and DOC—BDSA. The objective of this planning is to anticipate the areas of use of resources to support national defense and the production of essential survival items.

B. STATE

Under national emergency conditions, a limited type of production planning at the State level may be a requisite, especially for States which are completely dependent upon the importation of certain critical health survival items.

In order to determine the area of need for production planning, health materiel resource planners, working with production planners (Example of a State Plan for Emergency Management of Resources, Part B–VII, Industrial Production) must evaluate losses of production capacity for health survival items. Based on these findings, and through the DOC–BDSA, plans and procedures can be developed to continue production in existing facilities using State controlled resources, or to initiate production of selected items in preallocated facilities capable of adapting their operations to produce essential health items. (See the National Plan for Emergency Preparedness, Chapter 14, *Production*, Part III, BDSA *ACTIONS* 2, Peacetime Preparations.) Assigning and adapting the facilities and manpower of nonessential small industrial activities to the production of essential health items may increase the chances of survival of many casualties.

Planning for immediate postattack production to meet State deficiencies should be limited to those basic health survival items which can be produced from materials locally available.

STATE HEALTH RESOURCE TASK GROUPS

The information which follows is not intended to limit representation on task groups. It is intended to provide guidance on mandatory representation and sources, not necessarily represented by members, that should be requested to provide advisers to the task groups.

Representation from the following disciplines should be required on State health resources task groups:

Medicine
Dentistry
Nursing
Hospital administration
Pharmacy
Veterinary medicine
Sanitary engineering

The following sources must be represented on the Health Resources Task Group:

State health department
State employment service
State medical, dental, nursing, and hospital associations
Wholesale and retail suppliers of health supplies and equipment.

State officials have the prerogative to determine whether membership or an advisory capacity is desirable for the following groups:

Military medical service
Federal departments or agencies
Organized labor
State Public Works Department
State Welfare Department
American Red Cross
Schools of education for the health professions
State advisory committees to Selective Service on selection of physicians, dentists and allied specialties.

APPENDIXES

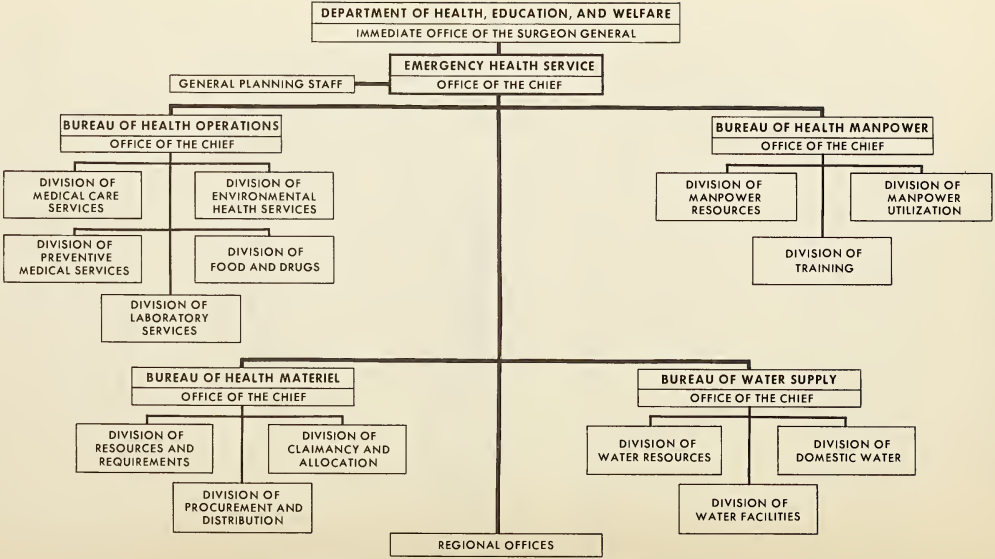

Figure 6.—Federal Emergency Health Service Organization

APPENDIX A

EMERGENCY HEALTH SERVICE (Federal headquarters)

A. PURPOSE

The following describes the organization, functions, staffing, and general administration of the Emergency Health Service (EHS). The majority of the direct operations of the EHS shall be conducted by the Regional EHS Offices working with the States and under policy control and guidance from headquarters. The following describes operations which must necessarily be centralized.

B. OBJECTIVE

The overall objective and mission of the Emergency Health Service will be to meet the health needs of the civilian population during a national emergency through: mobilization and effective utilization of health resources for the provision of health services including, when necessary, reestablishment or augmentation of State and local health services; maintenance of the health of the surviving uninjured population; physical and vocational rehabilitation to assure the productive capacity of the greatest possible number of disabled people; and coordination of emergency water supply programs of the Federal Government to ensure an adequate and safe public water supply.

C. ORGANIZATION

At D+14 the Emergency Health Service shall be composed of the Office of the Chief, a General Planning Staff, and four bureaus: Bureau of Health Operations, Bureau of Health Manpower, Bureau of Health Materiel, and Bureau of Water Supply. (See Organization Chart Page 32.) Prior to D+14, the small size of the EHS cadre will not warrant establishment of subunits.

D. FUNCTIONS

Immediate Postattack Period (D-Day to about D plus 14 days)

EHS operations during the immediate postattack period will be extremely limited because of probable disruption of communications and transportation, general immobility of personnel, and inevitable personnel losses. In spite of these handicaps, the following essential functions (arranged in approximate order of priority) must be performed during this period by EHS officials at the relocation site (or if it is not operable, at other designated locations).

1. Personnel survival and site protection services

a. Provision of chemical, biological, radiological, and other site defense services.
b. Provision of medical care, sanitation, and other employee (and, if appropriate, dependents) health services.
c. Provision of food, water, etc.

2. Administrative and management functions

a. Provisions of communications and other supporting services personnel as required by the Office of the Secretary for centralized general services.
b. Establishment of 24-hour duty schedules.
c. Maintenance of official records of classified and unclassified communications received and EHS action taken.

3. Continuity of Government function

Provisions to assure the continuity, authority, and direction of Federal agencies involved in the EHS, in accordance with established orders of succession.

4. Staff support functions

a. Provision of staff support, information, and consultation to the Secretary of HEW and other key officials.
b. Attack damage assessment (including fallout plotting and interpretation) and general health situation analysis.

5. EHS program functions

a. Health resources evaluation and development of health situation summaries and reports.
b. Resources claimancy based upon estimates of resource requirements and in accordance with claimancy policy and procedures established by the various resource controlling agencies.

c. EHS program policy and decision formulation, direction, and execution of emergency health program plans.
d. Provision of guidance and consultation to regional EHS offices, as communications permit.
e. Review and revision of emergency program plans in the light of post-attack circumstances.
f. Issuance of nationwide announcements pertaining to health situations, hazards, and defenses.

6. *Expansion function*

Preparation of administrative arrangements and briefing materials for EHS personnel having delayed (D+14) relocation assignment.

D Plus 14 Days

In accordance with DHEW plans for gradual build-up of emergency staffs, the Bureaus of the Emergency Health Service will be established at D+14 to perform the following functions:

1. *Office of the Chief*

a. Directs the activities of the Emergency Health Service, with the advice and assistance of a General Planning Staff, special staff assistants, and advisory bodies.
b. Maintains contacts and coordinates Bureau contacts with other Federal departments and agencies, regional offices, State governments, professional organizations, and voluntary organizations on health program policy matters.
c. Maintains intelligence on international health operations and programs.
d. Provides personnel services for the PHS Commissioned Corps and administrative and public information services not available from DHEW.

2. *General Planning Staff*

a. Coordinates EHS planning activities and assures conformance with DHEW and national policies.
b. Evaluates nature and extent of national health problems.
c. Advises the Chief, EHS, on matters of general program emphasis and overall policy.
d. Recommends program and organizational adjustments necessary to meet changing emergency needs.
e. Suggests legislation needed to support program activities.
f. Advises on the continuation of emergency programs and initiation

of rehabilitation, reconstruction, research, education, and grant programs.

g. Maintains interpretive relations with professional health organizations and voluntary organizations on broad program considerations.

h. Develops plans for conversion to and recommends resumption of peacetime operation.

3. *Bureau of Health Operations*

a. Determines national civilian requirements.

b. Conducts programs to meet the needs for individual medical services, environmental health services, community health services, rehabilitation services, and research and laboratory services.

c. Conducts programs to ensure the safety and potency of drugs and biologicals.

d. Conducts programs to ensure the safety of food.

4. *Bureau of Health Manpower*

a. Determines availability of and requirements for health manpower.

b. Claims health manpower for domestic civilian requirements.

c. Establishes procedures by which other government agencies—Federal, State, or local—will take administrative actions to implement health authority decisions to recruit, transfer, and control health manpower.

d. Coordinates and directs the deployment of the PHS Commissioned Corps.

e. Determines and directs most effective interregional distribution and utilization of health manpower for national survival and recovery.

f. Develops and coordinates national training program to meet evolving health needs.

5. *Bureau of Health Materiel*

a. Determines civilian requirements for health and medical supplies, equipment, and facilities, and for supporting supplies and services.

b. Develops plans and standards and conducts programs for the construction of hospitals and other health facilities.

c. Administers programs for the procurement, storage, and distribution of civilian health materiel resources.

d. Determines requirements for and presents claims for controlled materials needed for construction of health facilities, and recommends to Department of Commerce the distribution of approved allocations.

e. Coordinates with the Department of Commerce the requirements for controlled materials needed for the production of medical supply items and equipment, and supplies and equipment for water and sanitation systems.

6. *Bureau of Water Supply*

a. Plans and directs programs to provide an adequate and safe public water supply.
b. Evaluates and interprets national and regional water supply resources and damage reports.
c. Determines new public water supply facilities construction needs.
d. Develops public health and sanitary engineering design standards.
e. Coordinates planning for water facilities repair and construction by Federal agencies.
f. Estimates requirements for water processing and handling materials, supplies and equipment.
g. Provides professional and technical assistance and consultation.
h. Coordinates the water use programs of Federal agencies and assesses their water requirements.
i. Arbitrates conflicting claims for water and allocates water.

E. ADMINISTRATION

The head of the Emergency Health Service shall be titled Chief, Emergency Health Service. A predesignated official of the Food and Drug Administration shall serve as Associate Chief, Emergency Health Service. A predesignated official of the Veterans Administration shall serve as Associate Chief, Emergency Health Service. Provision shall be made for representation by other cooperating agencies at the appropriate policy level of the EHS.

APPENDIX B

PROGRAM REQUIREMENT RESPONSIBILITIES OF DHEW

Program by SIC Title and Code	*Federal Claimant Agency*	*Explanatory Notes on Assignment*
E. TRANSPORTATION, COMMUNICATION, ELECTRIC, GAS, AND SANITARY SERVICES		
494 Water supply systems *Operation and maintenance*	*HEW*	*Cover requirements for publicly and privately owned systems of all types serving the public, including postattack emergency systems.*
495 Sanitary services *Operation and maintenance*	*HEW*	*For division of responsibility between HEW and HHFA, see Memorandum of Understanding between these agencies.*
H. SERVICES		
72 Personal services except	*BDSA*	
726 Funeral services and crematories	*HEW*	*Includes publicly and privately owned and operated establishments (except DOD) serving the general public.*
80 Medical and other health services	*HEW*	*Covers requirements for publicly and privately owned and operated establishments (except DOD) serving the general public, including postattack requirements for emergency health and emergency casualty care services. (See SIC 995.)*
I. GOVERNMENT		
91 Federal Government General Administration *Civilian manpower requirements for Federal employees under:* *PHS Commissioned Corps*	*HEW*	
Public Buildings Service	*GSA*	*Excludes buildings and facilities used exclusively by HEW, and VA health facilities and other buildings and facilities not under the Public Buildings Service or serviced by GSA under present or future support agreements.*

Stockpile management, including storage, maintenance and commercial transportation of:	.....	*Requirements for facilities and services provided or procured by GSA under present and future interagency agreements will be estimated or assembled and submitted by GSA.*
Medical stockpiles.....	*HEW*	
91 Federal, State and		
92 Local Government		
93 Civil defense programs, including... Damage assessment facilities	*DOD/OCD*.....	*Excludes requirements for operation, maintenance, repair, and construction of publicly and privately owned business and service establishments producing goods and services for use of the general public, e.g., . . . health facilities, water and sanitary systems; etc. (See SIC DIVISION A–H.)*
94 International Government.....	*DOS Associated claimant agencies*	
Government and private requirements of foreign nations, excluding . . . military requirements, for U.S. goods and services unless valid international arrangements stipulate other procedures	*DHEW*.....	*The appropriate associated claimant agencies shall advise and cooperate with the Department of State in its capacity as claimant in developing, reviewing, and analyzing foreign requirements for U.S. goods and services.*
J. CIVILIAN CONSUMPTION AND HOUSING		*The programs under this division cover requirements for specific items needed to sustain the civilian population.*
995 Health and medical supplies and equipment for civilian use	*HEW*.....	*Covers domestic civilian requirements for health and medical items purchased by individuals for own use, including items purchased on doctor's prescription. Excludes requirements for postattack operations of emergency health and casualty care services. (See SIC 80.)*
996 Water for civilian population.....	*HEW*.....	*Covers the total domestic requirements for potable water needed by the civilian population. Excludes governmental, commercial, industrial and agricultural requirements for water. (See SIC DIVISIONS A–I.) Excludes requirements for the operation, maintenance, repair and constructiion of water supply systems of all types. (See SIC 494.)*

APPENDIX C

GLOSSARY

HEALTH MATERIEL RESOURCES—supplies, equipment, and facilities required in the conduct of health services programs to prevent the impairment of and to improve and restore the physical and mental health conditions of the civilian population.

HEALTH RESOURCE MANAGEMENT—the planning, organizing, coordinating, and controlling of health and related resources. It includes the development of a system for estimating the availability of resources postattack, estimating the demand by potential users, and for controlling the use of health resources to support essential health survival and recovery activities.

DAMAGE ASSESSMENT—(1) attack analysis (determination of the extent and character of the attack); (2) casualty estimation (determination of specific weapons effects on human resources); and (3) individual resource assessment (determination of specific weapons effects on material resources).

RESOURCE EVALUATION—the process of estimating for specific postattack time periods and for various geographic areas the availability and need for surviving resources and the interrelationships between resource categories. This process consists of (1) requirement estimation (determination of quantitative requirements for emergency health and related resources and services and for supporting goods and services), and (2) supply-requirements analysis (determination of specific resource deficiencies and geographic imbalances).

TOTAL HEALTH REQUIREMENTS—estimates or forecasts of the amounts of health resources and other manpower, goods, and services that will be required under specific situations during stated future periods to carry out a particular program, or group of health programs.

GROSS REQUIREMENTS—an estimate which includes the total quantity of an item or resource without consideration of available assets.

NET REQUIREMENTS—an estimate which reflects the deficiency in quantity of an item or resource after deducting all available assets under the control of the management level preparing the estimate.

FEDERAL RESOURCE AGENCY—a designated Federal agency which has been assigned, for planning purposes, the responsibility in an emergency for regulating, controlling, or providing operational direction to the activities of a broad segment of the economy or a portion thereof.

FEDERAL CLAIMANT AGENCY—a designated Federal agency which has been assigned, for planning purposes, the responsibility for developing and/or assembling from associated claimant agencies data on the amounts of goods, services and manpower that will be required during stated future time periods to carry out its assigned program responsibilities (see Appendix B).

AN ASSOCIATED CLAIMANT—a Federal agency that has been assigned claimancy responsibility for a program or group of economic activities that is a part of a broader program.

APPENDIX D

HEALTH RESOURCES INDEX

(Primary and Secondary)

[P—Primary S—Secondary]

NOTE.—The symbols S–P indicate facilities which have an immediate local post-attack mission and will be recalled to a Federal mission at a later date.

Description of Resource	Inventories of Health End-Items	Facility Mission	Staff	Facilities (Plant)
Federal military health resources	P.....	P.....	P.....	P
CD medical stockpile depots...	P.....	P.....	P.....	P
VA hospitals, domiciliaries, etc.	S.....	S–P....	S–P....	P
VA supply depots.....	P.....	P.....	P.....	P
PHS supply service center.....	P.....	P.....	P.....	P
Packaged Disaster Hospitals (PDH's)*	S.....	.....	.....	.....
PHS—hospitals.....	S.....	S–P....	S–P....	P
PHS—Indian and Alaskan health facilities	S.....	S–P....	S–P....	P
PHS—National Institutes of Health Clinical Center	S.....	S–P....	S–P....	P
PHS–Robert A. Taft Sanitary Engineering Center	P.....	P.....	P.....	P
PHS—Communicable Disease Center	P.....	P.....	P.....	P
PHS—Foreign quarantine facilities	P.....	P.....	P.....	P
PHS–Alaskan facilities.....	S.....	S–P....	S–P....	P
Stocks of the Bureau of Narcotics	P.....	.....	.....	.....

*Preallocated to the States.

Description of Resource	Inventories of Health End-Items	Facility Mission	Staff	Facilities (Plant)
Producers of health supplies	P	P	P	P
Wholesale medical supply distributors (Interstate)	S	S		
Wholesale health equipment distributors (Interstate)	S	S		
Intrastate medical and health health supply distributors	S	S		
Medical supplies in drug stores and other retail outlets	S	S		
Non-Federal Medical Care Facilities				
Hospitals, public and private	S	S	S	S
Health and medical laboratories	S	S	S	S
Health rooms: clinics, convalescent homes	S	S	S	S
Infirmaries	S	S	S	S
Medical and health schools	S	S	S	S
Supplies and Equipment for Operation and Maintenance of:				
Sanitary services	S	S	S	S
Preventive health programs	S	S	S	S
Funeral services and crematories	S	S	S	S

U.S. GOVERNMENT PRINTING OFFICE:1965 O—778-258

Publications in the Health Mobilization Series are keyed by the following subject categories:

A—Emergency Health Service Planning

B—Environmental Health

C—Medical Care and Treatment

D—Training

E—Health Resources Evaluation

F—Packaged Disaster Hospitals

G—Health Facilities

H—Supplies and Equipment

I—Health Manpower

J—Public Water Supply

Public Health Service Publication No. 1071 A–4